# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/889,666 | 09/25/2001 | Rudolf Kodes | 1454.1079 | 6964 |

| 21171          7590          12/21/2006 | EXAMINER |
|---|---|
| STAAS & HALSEY LLP | THANGAVELU, KANDASAMY |
| SUITE 700 | |

| | ART UNIT | PAPER NUMBER |
|---|---|---|
| 1201 NEW YORK AVENUE, N.W. | | |
| WASHINGTON, DC 20005 | 2123 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 12/21/2006 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

| | Application No. | Applicant(s) |
|---|---|---|
| | 09/889,666 | KODES, RUDOLF |
| **Office Action Summary** | Examiner | Art Unit | |
| | Kandasamy Thangavelu | 2123 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>07 November 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>5-7,9,11,20 and 21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>5-7, 9, 11, 20 and 21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *  c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1.      This communication is in response to the Applicants' Response mailed on

November 7, 2006. Claims 1, 10, 12 and 13 were canceled. Claims 5, 9, 11 and 21

were amended. Claims 5-7, 9, 11, 20 and 21 of the application are pending. This office

action is made non-final.

### *Claim Rejections - 35 USC § 103*

2.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.

3.      The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

    1.    Determining the scope and contents of the prior art.
    2.    Ascertaining the differences between the prior art and the claims at issue.
    3.    Resolving the level of ordinary skill in the pertinent art.
    4.    Considering objective evidence present in the application indicating obviousness
          or nonobviousness.

4.       Claims 5-7, 9, 11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Agrawal et al.** (U.S. Patent 6,278,977) in view of **Steinman** (U.S. Patent 6,324,495), and

further in view of **Virtamo et al.** (U.S. Patent 5,503,249).

4.1      **Agrawal et al.** teaches Deriving process models for workflow management systems from

audit trails. Specifically, as per claim 21, **Agrawal et al.** teaches a (processing) method (for an

engineering activity) (Abstract, L1-9; CL2, L16-23), comprising:

modeling an engineering activity having a plurality of interrelated events with

relationships defined between the events (CL2, L16-23; Fig. 4, Items A, B and C);

displaying the model of the engineering activity with all relationships being shown; and

selecting a first event of the engineering activity using a graphical user interface (CL2, L16-23;

Fig. 4; CL3, L24-29; CL9, L21-26);

preparing first connections to connect the first event of the engineering activity to a set of

second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

determining at least one third event of the engineering activity from the set of second

events (Fig. 4, Item D, B and C; CL2, L18-23).

**Agrawal et al.** does not expressly teach preparing first connections to connect the first

event of the engineering activity to a set of second events of the engineering activity in a cause-

and-effect relationship. **Steinman** teaches preparing first connections to connect the first event

of the engineering activity to a set of second events of the engineering activity in a cause-and-

effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54). It would have been obvious to

one of ordinary skill in the art at the time of Applicants' invention to modify the method of

**Agrawal et al.** with the method of **Steinman** that included connecting a first event of the

engineering activity to a set of second events of the engineering activity in a cause-and-effect

relationship, because processing of an event can affect the state variables of the engineering

system and can cause new events to occur in the future for one or more objects in the system;

this interaction of cause and effect relationship requires that the new events generated be

scheduled to occur at activity time later than current time (CL1, L48-54).

     **Agrawal et al.** and **Steinman** do not expressly preparing at least one second connection

to connect the at least one third event to the first event in a predecessor/successor relationship;

and displaying the first event together with connections selected from the group consisting of the

first connections and the at least one second connection, the first event and the connections being

displayed without displaying any relationship unless the relationship is defined by a first or

second connection. **Virtamo et al.** teaches preparing at least one second connection to connect

the at least one third event to the first event in a predecessor/successor relationship; and

displaying the first event together with connections selected from the group consisting of the first

connections and the at least one second connection, the first event and the connections being

displayed without displaying any relationship unless the relationship is defined by a first or

second connection (Fig. 3, Move event to stop event, where stop event is the third event and

move event is first event; pass event is the second event; open event to close event, where open

event is the first event and close event is the third event; there can be another open event while

the door is closing if a customer enters the car while it is closing; inherent in elevators is

passenger deboard event as a first event; passenger board event as the second event; door close

event as the third event; if there are no passengers waiting at the floor to board the car, the

passenger deboard event will be followed by the third event, door close; CL2, L53 to CL3, L1;

CL2, L65 to CL3, L1; CL3, L22-25; CL3, L34-39). It would have been obvious to one of

ordinary skill in the art at the time of Applicants' invention to modify the method of **Agrawal et**

**al.** and **Steinman** with the method of **Virtamo et al.** that included preparing at least one second

connection to connect the at least one third event to the first event in a predecessor/successor

relationship; and displaying the first event together with connections selected from the group

consisting of the first connections and the at least one second connection, the first event and the

connections being displayed without displaying any relationship unless the relationship is

defined by a first or second connection, because that would allow efficiently operating the

system in an optimal manner to ensure that the service offered to the customers was as efficient

as possible; in elevators this would be minimization of average passenger waiting time (CL1,

L16-21).


Per claim 5: **Agrawal et al.** teaches the events have a predecessor/successor relationship

with respect to one another (CL8, L6-15; CL10, L40-47).


4.2     As per claims 6 and 7, **Agrawal et al.** and **Steinman** do not expressly that the first event

precedes the third event in the predecessor/successor relationship; the third event succeeds the

first event in the predecessor/successor relationship. **Virtamo et al.** teaches that the first event

precedes the third event in the predecessor/successor relationship; the third event succeeds the

first event in the predecessor/successor relationship (Fig. 3, Move event to stop event, where stop

event is the third event and move event is first event; pass event is the second event; open event

to close event, where open event is the first event and close event is the third event; there can be

another open event while the door is closing if a customer enters the car while it is closing;

inherent in elevators is passenger deboard event as a first event; passenger board event as the

second event; door close event as the third event; if there are no passengers waiting at the floor to

board the car, the passenger deboard event will be followed by the third event, door close; CL2,

L53 to CL3, L1; CL2, L65 to CL3, L1; CL3, L22-25; CL3, L34-39).

Per claims 9 and 11: **Agrawal et al.** teaches that the events have associated information

generated as results of the activities (CL3, L24-29; CL7, L57-59); and

the graphical representation is effected by means of actuation using a context-sensitive

menu (CL3, L24-29; CL7, L57 to CL8, L5).

Per claim 20: **Agrawal et al.** teaches that the events have associated information,

generated as results of the activities (CL11, L45-55).

### *Response to Arguments*

5.      Applicant's arguments with respect to 35 USC 103 (a) rejections filed on November 7,

2006 have been considered. Applicant's arguments with respect to 35 USC 103 (a) rejections are

persuasive.

5.1     As per the applicant's argument that "Claim 21 recites that the first event, together with

the first and/or second connections are displayed without displaying any relationship unless the

relationship is defined by a first or second connection; in Fig. 4 of Agrawal et al. unrelated

connections are shown; if event A is selected, then the connections from events from events B and

C to event D are unrelated; accordingly, Fig. 4 of Agrawal et al. does not satisfy the limitations of

the claims; the events in Agrawal et al. are activities; claim 21 requires events to be connected in a

cause and effect relationship", the Examiner has used a new reference **Virtamo et al.** together

with **Agrawal et al.** and **Steinman.**


        **Virtamo et al.** teaches preparing at least one second connection to connect the at least

one third event to the first event in a predecessor/successor relationship; and displaying the first

event together with connections selected from the group consisting of the first connections and

the at least one second connection, the first event and the connections being displayed without

displaying any relationship unless the relationship is defined by a first or second connection (Fig.

3, Move event to stop event, where stop event is the third event and move event is first event;

pass event is the second event; open event to close event, where open event is the first event and

close event is the third event; there can be another open event while the door is closing if a

customer enters the car while it is closing; inherent in elevators is passenger deboard event as a

first event; passenger board event as the second event; door close event as the third event; if

there are no passengers waiting at the floor to board the car, the passenger deboard event will be

followed by the third event, door close; CL2, L53 to CL3, L1; CL2, L65 to CL3, L1; CL3, L22-

25; CL3, L34-39).

   **Agrawal et al.** does not expressly teach preparing first connections to connect the first

event of the engineering activity to a set of second events of the engineering activity in a cause-

and-effect relationship. **Steinman** teaches preparing first connections to connect the first event

of the engineering activity to a set of second events of the engineering activity in a cause-and-

effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54).


### *Conclusion*


6.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is

571-272-3717. The examiner can normally be reached on Monday through Friday from

8:00 AM to 5:30 PM.


   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

   Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.


   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

K. Thangavelu
Art Unit 2123
December 19, 2006